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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,287	08/27/2001	Cornelius Peter	TRW20269	2716
7590 07/23/2004			EXAMINER	
James W McKee Fay Sharpe Fagan Minnich & McKee 1100 Superior Avenue 7th Floor Cleveland, OH 44114-2518			TAMAI, KARL I	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 07/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	09/831,287	PETER ET AL.	
	Examiner	Art Unit	
	Tamai IE Karl	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,11-18 and 20-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,11-18 and 20-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the stator supported exclusively or solely by the base plate and the stator supported without connection to the housing the stator supported exclusively by the base plate, the substantial portion and substantially all of the baseplate not connecting the housing must be shown or the features canceled from the claims. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The objection to the abstract is withdrawn.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 11-18, and 20-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably

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convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Claims 1, 11-18, and 20-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification does not enable or contain a full, clear, concise, and exact written description of the stator supported exclusively or solely by the base plate and the stator supported without connection to the housing. The stator clearly is supported by the non-rigid connection 12 to the shaft support 15, which is part of the housing 3. The specification page 3, line 13 particularly defines the connection as reducing the torque transmissions, which means that some torque is transmitted through the coupling. Therefore the claims are not supported or enabled by the specification.

Claims 30 and 31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. There is no support in the specification for a substantial portion or substantially all of the base plate area not contacting the housing. Claims 30 and 31 are rejected as being new matter.

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5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 12-17, and 20-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1, 12-17, 19-29 are vague and indefinite because it is unclear how the stator can be retained by the shaft support or have a flexible couple with the shaft support, while at the same time being solely or exclusive supported by the base plate. If there is a connection between the stator and shaft support then there base plate is not the sole/exclusive support.

Claims 30 and 31 are vague and indefinite because the specification does not provide any guidance as to what constitutes "a substantial portion" or "substantially all" of the area of the base plate.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Beppu et al. (Beppu)(US 5008573). Beppu teaches a motor having a housing 12 with a bearing support (for bearings 5b) with a stator traversed by the bearings support and a base plate fastened to the housing at 42 but not over the entire area of the housing, where transmission of torque can only occur through the baseplate.

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9. Claims 1, 11, and 18 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Maughan et al. (Maughan)(US 5,365,388). Maughan teaches an electromotive drive with a housing 42 having a stator mounted around but not in contact with the shaft support and connected to the housing only through the baseplate 17, which is connected to the housing by a torque coupling screw. The baseplate 17 connect to the housing 42 by less than the entire area of the baseplate (see the grid of baseplate 11 in figure 3, and the cross-section of figure 5).

10. Claims 1, 11 and 18 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Takahashi (JP 05-199,721). Takahashi teaches an electromotive drive 9 with a housing 6 having a stator 10 mounted around but not in contact with the shaft support 7. The stator being supported solely and exclusively by the baseplate 20, which includes a rigid, torque transmission couple 15 at surface of the housing only at the select points of the housing at 15 (claim 1), the baseplate attached at less than the entire area of the baseplate (see figure 2 showing substantially all of the area of the baseplate is not connecting the housing, only the inner and outer edges).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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12. Claims 12, 15-18, 24, and 26-31, are rejected under 35 U.S.C. 103(a) as being unpatentable by Takahashi (JP 05-199,721), in further view of by von der Heide et al. (von der Heide)(US 4,647,803). Takahashi teaches every aspect of the invention except the use of the resilient member between the stator support and the stator. Von der Heide teaches an electromotive drive with a housing 26 having a stator mounted around but not in contact with the shaft support 22, with an o-ring 54 in a groove 55 to reduce noise. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the motor of Takahashi with the o-rings of von der heide to reduce noise.

13. Claims 13, 14, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable by Takahashi (JP 05-199,721) and von der Heide et al. (von der Heide)(US 4,647,803) in further view of Norton et al. (Norton) (GB 2,293,695). Takahashi and Von der Heide teaches every aspect of the invention except a viscous medium or grease in the gap. Norton teaches that grease (a viscous medium) is used to dampened vibration with the stator support. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the motor of Takahashi and von der Heide with the gap having grease to reduce vibrations.

14. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over von der Heide et al. (von der Heide)(US 4,647,803), in further view of Komatsu (JP 09-149,602). Von der Heide teaches the circuit board is extrusion coated to absorb sound.

Von der Heide teaches every aspect of the invention except a base with a punch out grip and a torque coupling means to ground the stator. Komatsu teaches the stator grounded through a circuit board base with a punch out grid by a conductor tract and to the housing by terminals 8. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the motor of von der Heide with the stator grounded through a circuit board base to reduce harmful electromagnetic noise as taught by Komatsu.

15. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over von der Heide et al. (von der Heide)(US 4,647,803) and Komatsu (JP 09-149,602). Von der Heide and Komatsu teach every aspect of the invention except the plastic extrusion coating. Von der Heide teaches the circuit board is coated with polyurethane, but does not teach the coating being plastic. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the motor of Von der Heide and Komatsu with a plastic coating because it has been held that selection of the material based on intended use is within the ordinary skill in the art (see *In re Leshin*, 125 USPQ 416).

Response to Arguments

16. Applicant's arguments filed May 6, 2004 have been fully considered but they are not persuasive. The Applicant's argument that the claims have been amended to remove the stator being solely or exclusively by the base plate relative to the housing is not persuasive because the claim maintain these limitations. Therefore the objection to

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the drawings and claims are maintained. The examiner notes that the specification particularly defines the stator support as "The transmission of torque moment occurs essentially only via the coupling of the stator with the remaining housing and not through the shaft support", page 2, line 33; which is not "solely" or "exclusively" as set forth in the claims. The Applicant's argument regarding the non-rigid connections are not persuasive because Takahashi and Maughan teach the non-rigid connection over a substantial portion of the baseplate.

Conclusion

17. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (571) 272 - 2036.

The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Darren Schuberg, can be reached at (571) 272 - 2044. The facsimile number for the Group is (703) 872 - 9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Karl I Tamai
PRIMARY PATENT EXAMINER
July 19, 2004



KARL TAMAI
PRIMARY EXAMINER